

ABSTRACT OF THE DISCLOSURE

An integrated circuit test apparatus and a method for testing an integrated circuit are described. The integrated circuit test apparatus includes a holder adapted to receive a wafer, where a frontside of the wafer is accessible to be probe tested by electrically conducting probe needles during which a backside of the wafer is accessible to be scanned by an optical scanning mechanism. The scanning mechanism can optically detect photoemission-generated defects resulting from electrical stimuli applied to the integrated circuits via the probe needles. The holder is coupled to a three-dimensional translational mechanism that will allow for automated multi-die test probing.